

考試科目	經濟學	系所別	國貿、會計、財管、風管 (一、二、三)	考試時間	7月3日(三) 第二節
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I. Multiple Choice (3 points each)

Identify the letter of the choice that best completes the statement or answers the question.

- Jason says that he will spend exactly \$25 each month on new apps for her mobile device, regardless of the price of the apps. Jason's demand for apps is
 - perfectly inelastic.
 - unit elastic.
 - perfectly elastic.
 - More information is needed.
- Most economists prefer corrective taxes to regulation as a way to correct the problem of pollution because the market-based solution
 - balances the demand and supply for pollution.
 - can result in a more significant increase in pollution.
 - increases revenue for firms.
 - is less costly to society.
- Excessive use exists in Taiwan's health care system. Which of the following terms describes the problem correctly?
 - the free-rider problem
 - the tragedy of the commons
 - a public good
 - cost-benefit analysis
- Which combination is NOT compatible with a monopolist's profit-maximizing behavior?
 - slope of demand = -5, price = 5, quantity = 1
 - slope of demand = -5, price = 1, quantity = 5
 - slope of demand = -3, price = 7, quantity = 2
 - slope of demand = -3, price = 2, quantity = 7
- A monopolistically competitive firm is currently producing 23 units of output. At this output level, the firm charges the highest price it can at \$25, has a marginal revenue equal to \$19, has a marginal cost equal to \$19, and has an average total cost equal to \$22. From this information, we can infer that
 - firms are likely to leave this market in the long run.
 - the firm is earning zero profit.
 - increasing the quantity produced will raise per-unit costs.
 - the firm is currently maximizing its profit.

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- 作答於試題上者，不予計分。
- 試題請隨卷繳交。

考試科目	經濟學	系所別	國貿、會計、財管、風管 (二、三級)	考試時間	7月3日(三) 第二節
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6. Consider the following game

		<i>B</i>		
		Left	Center	Right
<i>A</i>	UP	$A = 1, B = 4$	$A = 6, B = 2$	$A = 3, B = 1$
	Middle	$A = 2, B = 2$	$A = 4, B = 6$	$A = 5, B = 7$
	Down	$A = 3, B = 2$	$A = 5, B = 5$	$A = 4, B = 3$

Which of the following statements regarding this game is true?

- A. Player *A* has a dominant strategy.
 B. Player *B* has a dominant strategy.
 C. If player *A* chooses Down, player *B* should choose Right.
 D. (Middle, Right) is the Nash Equilibrium.
7. A rise in the price of imported final goods in a country will
 A. lead to a rise in both the country's GDP deflator and the CPI.
 B. lead to a rise in the country's GDP deflator.
 C. lead to a rise in the country's CPI.
 D. leave both the country's GDP deflator and CPI unchanged.
8. Assume Country *A* has 5 people, all of whom are between the ages of 16 and 50. One of them is in jail, one is a househusband, one just graduated from school and is seeking a job, and the remaining two are currently employed by a company. What is the labor participation rate of Country *A*?
 A. 60%
 B. 67%.
 C. 75%.
 D. 100%.
9. Which of the following situations will lead to the short-run Phillips curve shifting to the right?
 A. The actual price level is higher than the consumers' expected price level.
 B. The actual price level is lower than the consumers' expected price level.
 C. The menu costs are large.
 D. The consumers' expectation has changed.
10. Other things being equal, in the long run, a capital flight from Ukraine to the U.S.A. will lead to a/an _____ of the real exchange rate of the U.S. dollar, measured by how many Ukrainian hryvnias (UAH) per U.S. dollar and a/an _____ of the real interest rate in the U.S.A.
 A. depreciation; increase

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<p>B. depreciation; decrease C. appreciation; increase D. appreciation; decrease</p> <p>11. Assume the PPFs of Country A and Country B are both straight lines with negative slopes in the first quadrant of an X-Y plane, and Country A's PPF is steeper than Country B's PPF. Which of the following statements is correct when two countries move from autarky to free trade?</p> <p>A. Country A exports the good on X-axis. B. The price of the good on X-axis will drop. C. Country A's PPF will shift out. D. Country A's opportunity cost in producing X will drop.</p> <p>12. Which of the following policies will directly lead to the long-run Phillips curve shifting to the right?</p> <p>A. The central bank sells government bonds. B. The government raises the sales tax. C. A tariff is imposed on the country's export goods. D. The government increases unemployment insurance benefits.</p> <p>13. According to liquidity preference theory, if the price level decreases, then</p> <p>A. the interest rate falls because money demand shifts right. B. the interest rate falls because money demand shifts left. C. the interest rate falls because the quantity of money demanded decreases due to a movement up and to the left along the money demand curve. D. the interest rate falls because the quantity of money demanded increases due to a movement down and to the right along the money demand curve.</p> <p>14. Given a nominal interest rate of 6 percent, in which of the following cases would you earn the highest after-tax real rate of interest?</p> <p>A. Inflation is 2.5 percent; the tax rate is 25 percent. B. Inflation is 3 percent; the tax rate is 20 percent. C. Inflation is 2 percent; the tax rate is 30 percent. D. The after-tax real interest rate is same for all of the above.</p> <p>15. When the economy goes into recession, those in favor of 'leaning against the wind policies' would advocate</p> <p>A. increasing the money supply and cutting taxes. B. decreasing the money supply and cutting taxes. C. decreasing the money supply and raising taxes.</p>					
備註	<p>一、作答於試題上者，不予計分。 二、試題請隨卷繳交。</p>				

考 試 科 目	經濟學	系 所 別	國貿、會計、財管、風管 (二、三、四)	考 試 時 間	7 月 3 日(三) 第二節
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D. increasing the money supply and raising taxes.

16. Other things the same, if technology improves, then in the long run

- A. both output and prices are higher.
- B. output is higher and prices are lower.
- C. output is lower and prices are higher.
- D. both output and prices are lower.

II. Problems

1. The market demand and supply functions for eggs are:

$$Q^d = 55 - P \quad \text{and} \quad Q^s = 0.5P - 20.$$

(i) (6 points) Calculate the market equilibrium and the producer surplus.

(ii) (5 points) Now suppose this market is monopolized. The monopoly firm faces the same market demand curve and produces with the same cost function. Calculate the monopoly price, quantity, and consumer surplus.

(iii) (5 points) Compare (i) and (ii). What is the deadweight loss in the monopoly egg market?

2. Suppose a small country, A , has the following demand curve for good X :

$$Q = 1,212 - P,$$

where Q is quantity and P is the market price. The world price of good X is \$10. Please answer the following questions in detail.

(i) (4 points) Suppose Country A has 100 identical firms. The supply curve of each firm is:

$$q = P.$$

Is Country A an importer or exporter of good X ? What amounts does it import or export?

(ii) (6 points) Continuing from the previous question, with Country A subsidizing its producers by one dollar per unit of output, is Country A an importer or exporter of good X ? By how much does it import or export? What is the total amount of subsidies?

(iii) (6 points) Continuing from the previous question, instead of using subsidies, the government now wants to use a tariff to achieve the same quantity of imports or exports as in question (ii). What is the per-unit tariff?

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3. Consider a simple Keynesian model in which the aggregate expenditure consists only of consumption and government spending. The consumption function can be written as:

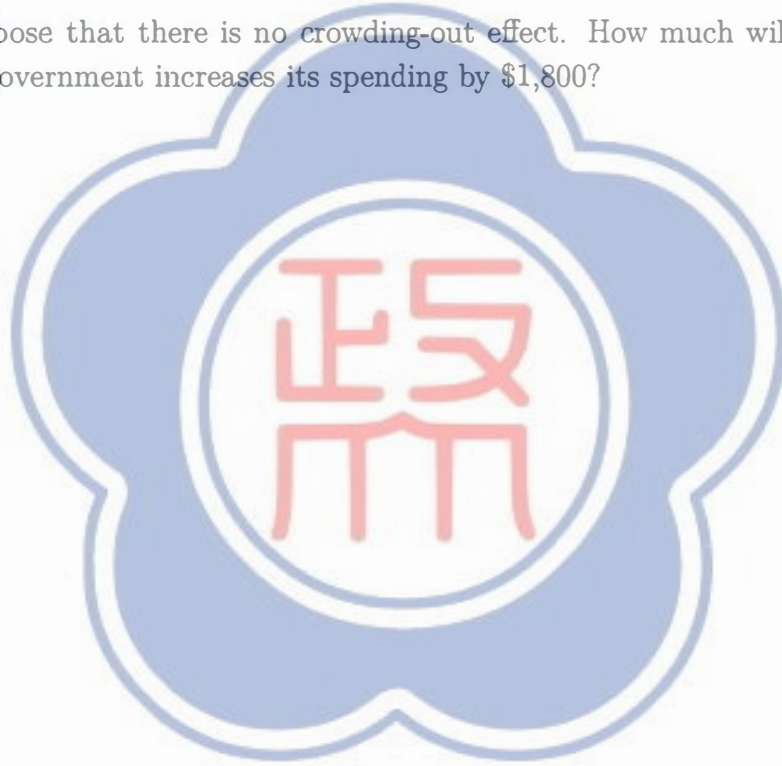
$$C = A + MPC \cdot Y,$$

where C , A , MPC , and Y denote consumption, autonomous consumption, marginal propensity to consume, and output level, respectively. The government spending, $G=2,000$.

(i) (12 points) Suppose that $C=7,000$ when $Y=7,000$ and $C=7,320$ when $Y=7,500$. What are the autonomous consumption and marginal propensity to consume in this economy?

(ii) (4 points) What is the level of output if the economy is in an income-expenditure equilibrium?

(iii) (4 points) Suppose that there is no crowding-out effect. How much will the equilibrium output increase if the government increases its spending by \$1,800?



備 註

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考試科目	微積分	系所別	經濟系、國貿系、統計系、 資管系、風管系 (二年級)	考試時間	7月3日(三) 第四節
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A.

Question 1: [5pts] Evaluate

$$\int_0^2 \frac{dx}{(x^2 + 4)^2}$$

by making the substitution $x = 2 \tan u$.

Question 2: [5pts] Starting at the point where $r = 1$, the point P moves counterclockwise along the polar curve $r = e^{6/2\pi}$, in such a way that the line segment OP makes one complete revolution. (Here O denotes the origin.) Sketch the curve, and find the total area swept out by OP as it makes the revolution.

Question 3: [10pts] Find all local maxima and minima of the function $f(x) = 2|x| - x^2 - 1$.

Question 4: [10pts] Suppose that $f'(x) = e^{x^2}$, and $f(0) = 10$. One can conclude from the mean value theorem that

$$A < f(1) < B$$

for which numbers A and B ?

Question 5: [20pts] Students studying for an exam get x hours of sleep in the two days leading up to the exam, where x is the range $0 \leq x \leq a$. The number of students who got between x_1 and x_2 hours of sleep is given by

$$\int_{x_1}^{x_2} cx dx; 0 \leq x_1 \leq x_2 \leq a$$

- (a) [10pts] What fraction of the students got less than $a/2$ hours of sleep?
- (b) [10pts] Their scores are proportional to the amount of sleep they got: $S(x) = 100(x/a)$. Find the (correctly weighted) average score in the class.

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B.

Problem 1 Prove or disprove the following statements:

- (8%) If $\sum_{n=1}^{\infty} a_n = A$ and $\sum_{n=1}^{\infty} b_n = B$ are both convergent, then $\sum_{n=1}^{\infty} a_n b_n = AB$.
- (8%) Suppose that $\lim_{n \rightarrow \infty} a_n = 0$ and $a_n > 0$ for all $n \in \mathbb{N}$. Then $\sum_{n=1}^{\infty} (-1)^{n+1} a_n$ is convergent.
- (8%) The series $\sum_{n=3}^{\infty} \frac{1}{\sqrt{n}(\ln n)^2}$ is divergent.

Problem 2 (8%) Evaluate $\iint_R (x+y)e^{x^2-y^2} dA$ where R is the rectangle enclosed by the lines $x-y=0$, $x-y=2$, $x+y=0$ and $x+y=3$.

Problem 3 (8%) Find the extreme value of $f(x, y) = e^{-xy}$ subject to $x^2 + 4y^2 \leq 1$.

Problem 4 (10%) Find the sum of the series $\sum_{n=1}^{\infty} n^3 x^n$ for $|x| < 1$.

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第一題 (20 Points) :

The statement of comprehensive income and the balance sheet for Faith Company for the year ended December 31, 2024 are shown below:

Faith Company
Statement of Comprehensive Income
For the Year Ended December 31, 2024

Sales revenue		\$10,800,000
Less: Cost of goods sold		<u>6,000,000</u>
Gross profit		\$ 4,800,000
Operating expenses:		
Advertising	\$ 420,000	
Rent	504,000	
Salaries	<u>1,800,000</u>	<u>2,724,000</u>
Net income		\$2,076,000
Other comprehensive income		<u>0</u>
Comprehensive income		<u>\$2,076,000</u>

Faith Company
Balance Sheet
December 31, 2024

Assets

Current assets:

Cash	\$ 1,980,000
Accounts receivable	900,000
Inventory	<u>600,000</u>
Total current assets	<u>3,480,000</u>
Buildings	<u>9,000,000</u>
Total assets	<u>\$ 12,480,000</u>

Liabilities

Accounts payable	\$ 1,080,000
Notes payable	<u>1,440,000</u>
Total liabilities	<u>\$ 2,520,000</u>

Equity

Capital stock	\$ 6,420,000
Retained earnings	<u>3,540,000</u>
Total equity	<u>\$ 9,960,000</u>
Total liabilities and equity	<u>\$ 12,480,000</u>

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During the end of year audit, the auditors found the following errors:

- (a) The payment of an account payable for \$144,000 was recorded twice.
- (b) On December 1, Faith Company paid a rent payment of \$108,000 for three months rent. The full \$108,000 was debited to rent expense on December 1. No adjusting entries were made to rent expense at year end.
- (c) No adjusting entry was made for salaries of \$264,000 that were earned in December but will not be paid until January.
- (d) Inventory that was paid for on account was recorded as \$144,000 instead of \$252,000.
- (e) On December 20, Faith Company borrowed a two-year loan \$240,000 from a bank by signing a note. The transaction was recorded as a credit to Accounts Payable.

Required:

- (1) Prepare Balance Sheet (in good form) after the errors have been corrected. (16 points)
- (2) Use the data after the errors have been corrected and compute the following ratios: (a) profit margin, and (b) current ratio. (4 points)

第二題 (10 Points)

On December 15, 2023, Thompson Inc. enters into a sales contract with its customer. The quantity is 200 units with the unit cost of \$180. The gross margin is 40 percent. The customer pays Thompson for the 200 units purchased and has the right of return within two months. The maximum quantity that the distributor can return is 40 units. Thompson uses the expected value to estimate the amount of variable consideration and concludes 36 units as a reasonable estimate about the quantity of sales return. During December 2023 and January 2024, the customer does not return any goods. On February 16, 2024, the customer returns 20 units.

Required: Prepare the following journal entries for Thompson Inc. (10 points)

Date	Accounts Title	Amount	
		Dr.	Cr.
December 15, 2023			
February 16, 2024			

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第三題 (15 Points) :

On January 1, 2024, Victory Industries, a calendar-year corporation, leased an airplane under a seven-year, noncancelable lease agreement that requires Victory to pay the lessor \$210,000 at the end of each year. The first payment is due December 31, 2024. Assuming that an implied interest rate to lessor is 9 percent. There is no bargain purchase option, and the airplane will be returned to the lessor at the end of the seven-year term of the lease. At January 1, 2024, the airplane has an estimated economic life of 10 years.

Required: Prepare the following journal entries necessary for Victory Industries.

	Year 2024	Year 2025	Year 2026
January 1		No entries needed	No entries needed
December 31			

第四題 (10 Points)

WrapAll Company is considering replacing its automated packaging machine. The machine is specialized and very expensive. WrapAll is considering three acquisition alternatives. The first is to lease a machine for 10 years at \$12 million per year, and WrapAll can buy the machine for \$2 million at the end of the lease term. The second alternative is to pay cash for the machine at a cost of \$84 million. The third alternative is to make a down payment of \$36 million, followed by 10 annual payments of \$6,600,000. Assuming an interest rate of 6 percent and the lease agreement will require WreapAll to pay the lessor at the beginning of each year. The company is trying to decide which alternative to select.

Required:

Ignore taxes and based only on the financial factors, determine which alternative WrapAll should choose. Using the following table show and round your computations to the second digit to the decimal.

1 st Alternative	2 nd Alternative	3 rd Alternative

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第五題 (20 Points) :

Joy Company owns part of three different companies. The information from balance sheet and the statement of comprehensive income for Joy Company and the three companies are shown below. The dollar amounts are in thousand.

	Percentage of Joy's Ownership			
	Joy	90% Company A	60% Company B	40% Company C
Assets				
Cash	\$ 10,560	\$ 3,520	\$ 2,640	\$ 5,280
Accounts receivable	44,000	10,560	7,920	4,400
Plant and equipment	92,400	35,200	14,080	26,400
Investment in Company A	25,344			
Investment in Company B	6,864			
Investment in Company C	7,392			
Total assets	<u>\$ 186,560</u>	<u>\$ 49,280</u>	<u>\$ 24,640</u>	<u>\$ 36,080</u>
Liabilities	79,200	21,120	13,200	17,600
Equity	107,360	28,160	11,440	18,480
Total liabilities and equity	<u>\$ 186,560</u>	<u>\$ 49,280</u>	<u>\$ 24,640</u>	<u>\$ 36,080</u>
Sales	564,960	264,000	264,000	704,000
Income from Company A	31,680			
Income from Company B	42,240			
Income from Company C	14,080			
Total Expenses	<u>(369,600)</u>	<u>(228,800)</u>	<u>(193,600)</u>	<u>(668,800)</u>
Net income	<u>\$ 283,360</u>	<u>\$ 35,200</u>	<u>\$ 70,400</u>	<u>\$ 35,200</u>

As noted there are no inter-company transactions among these four companies during the year.

Required:

- (1) Prepare a consolidated balance sheet in good form for Joy Company and its subsidiaries. (10 points)
- (2) Prepare a consolidated statement of comprehensive income in good form for Joy Company and its subsidiaries. (10 points)

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第六題 (25 Points)

Adam and Eve are examining the following statement of cash flows for Heaven Company for the year ended December 31, 2024.

Heaven Company	
Statement of Cash Flows	
For the Year Ended December 31, 2024	
Sources of cash:	
From sales of merchandise	\$1,400,000
From sale of ordinary shares	1,620,000
From sale of investments (purchased below)	340,000
From depreciation	300,000
From issuance of note for pick-up truck	100,000
From interest on investments	<u>24,000</u>
Total sources of cash	<u>3,784,000</u>
Uses of cash:	
For purchase of machinery and equipment	1,280,000
For merchandise purchased for resale	980,000
For operating expenses (including depreciation)	640,000
For purchase of investment	300,000
For purchase of truck by issuance of note	100,000
For purchase of ordinary shares	60,000
For interest on note payable	<u>20,000</u>
Total uses of cash	<u>3,380,000</u>
Net increase in cash	<u>\$ 404,000</u>

Adam claims that Heaven's statement of cash flows is an excellent portrayal of a successful first year with cash increasing \$404,000. However, Eve does not agree with Adam. Eve argues, the year was an operating failure, the statement is presented incorrectly, and \$404,000 is not the actual increase in cash.

Required:

- Using the data provided, prepare a statement of cash flows in proper form using the indirect method. (18 points)
- For Heaven's 2024 operation, show you computations of: (a) net income (loss) for the year, and (b) the actual amount of increase in cash. (7 points)

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Table 1 Present Value of \$1

n \ i	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.827
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.889	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.952	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.838	0.790	0.746	0.705	0.666	0.630	0.596	0.565
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.584	0.547	0.513
8	0.924	0.854	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.351
12	0.888	0.789	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.578	0.505	0.442	0.388	0.341	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.729	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

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Table 2 Present Value of an Ordinary Annuity of \$1

$n \backslash i$	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.914	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.714	4.580	4.452	4.330	4.212	4.100	3.993	3.890	3.791
6	5.796	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.326	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.761	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.560	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.679	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.878	13.590	12.462	11.470	10.594	9.818	9.129	8.514

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考 試 科 目	成本與管理會計	系 所 別	會計學系	年 級	三 年 級	考 試 時 間	7 月 3 日(三) 第二節
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Multiple choice questions (2.5 points for each) 選擇題請在答案卡上作答，否則不予計分。

- Which of the following is true of variable costing?
 - It expenses administrative costs as cost of goods sold.
 - It treats direct manufacturing costs as a product cost.
 - It includes fixed manufacturing overhead as an inventoriable cost.
 - It is required for external reporting to shareholders.
- AAA Manufacturing Inc, makes a product with the following costs per unit:

Direct materials \$130

Direct labor \$70

Manufacturing overhead (variable) \$40

Manufacturing overhead (fixed) \$180

Marketing costs \$95

What would be the inventoriable cost per unit under variable costing and what would it be under absorption costing?

- \$130 for variable costing and \$335 under absorption costing
 - \$240 for variable costing and \$335 under absorption costing
 - \$240 for variable costing and \$420 under absorption costing
 - \$200 for variable costing and \$335 under absorption costing
- An organization that is using the cost leadership approach would:
 - incur costs for innovative R&D
 - provide products at a higher cost than competitors
 - focus on productivity through efficiency improvements
 - bring products to market rapidly

備

註

- 作答於試題上者，不予計分。
- 試題請隨卷繳交。

考 試 科 目	成本與管理會計	系 所 別	會計學系 三年級	考 試 時 間	7 月 3 日(三) 第二節
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4. When deciding to lease a new cutting machine or continue using the old machine, the irrelevant cost is:
- A) \$50,000, cost of the old machine
 B) \$20,000, cost of the new machine
 C) \$10,000, selling price of the old machine
 D) \$3,000, annual savings in operating costs if the new machine is purchased
5. An unfavorable flexible-budget variance for variable costs may be the result of:
- A) using more input quantities than were budgeted
 B) paying lower prices for inputs than were budgeted
 C) selling output at a higher selling price than budgeted
 D) selling less quantity compared to the budgeted
6. J&J Materials and Construction Corporation produces fertilizer and distributes the product by using dump trucks. The company uses budgeted fleet hours to allocate variable manufacturing overhead. The following information pertains to the company's manufacturing overhead data:

Budgeted output units	680 truckloads
Budgeted fleet hours	476 hours
Budgeted variable manufacturing overhead costs for 680 loads	\$72,590
Actual output units produced and delivered	615 truckloads
Actual fleet hours	376 hours
Actual variable manufacturing overhead costs	\$67,790

What is the flexible-budget variance for variable manufacturing overhead?

- A) \$4,800 favorable
 B) \$4,800 unfavorable
 C) \$2,139 favorable
 D) \$2,139 unfavorable

備

註

- 一、作答於試題上者，不予計分。
 二、試題請隨卷繳交。

考 試 科 目	成本與管理會計	系 所 別	會計學系 三級	考 試 時 間	7 月 3 日(三) 第二節
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7. Variance analysis should be used:

- A) to understand why variances arise and to improve future performance
- B) as the sole source of information for performance evaluation
- C) to punish employees that do not meet standards
- D) to set the standards which are very easy to achieve to encourage employees to focus on meeting

8. Ski Company's 4-Variance Analysis:

	Spending Variance	Efficiency Variance	Production-Volume Variance
Variable overhead	\$6,900 F	\$11,000 U	No variance
Fixed overhead	(a)	No variance	\$45,000 U

Which of the following statements is true of Ski's overhead variances?

- A) Budgeted variable overhead rate is higher than actual variable overhead rate.
 - B) Static fixed overhead amount is higher than flexible fixed overhead amount.
 - C) Budgeted variable overhead rate is lower than actual variable overhead rate.
 - D) Static fixed overhead amount is lower than flexible fixed overhead amount.
9. First Class, Inc., expects to sell 27,000 pool cues for \$13 each. Direct materials costs are \$3, direct manufacturing labor is \$6, and manufacturing overhead is \$0.87 per pool cue. The following inventory levels apply to 2020:

	<u>Beginning inventory</u>	<u>Ending inventory</u>
Direct materials	29,000 units	29,000 units
Work-in-process inventory	0 units	0 units
Finished goods inventory	1,900 units	2,500 units

What are the 2020 budgeted costs for direct materials, direct manufacturing labor, and manufacturing overhead, respectively?

- A) \$87,000; \$174,000; \$25,230
 - B) \$86,700; \$173,400; \$25,143
 - C) \$82,800; \$165,600; \$24,012
 - D) \$81,000; \$162,000; \$23,490
10. If a computer manufacturer used its common stock price as a Balanced Scorecard control measure, it would be utilizing which of the following?
- A) an external measure
 - B) customer related measure
 - C) internal business process measure
 - D) learning and growth measure

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考試科目	成本與管理會計	系所別	會計學系	考試時間	7 月 3 日(三) 第二節
			三級		

11. Assembly department of Zahra Technologies had 200 units as work in process at the beginning of the month. These units were 50% complete. It has 300 units which are 30% complete at the end of the month. During the month, it completed and transferred 600 units. Direct materials are added at the beginning of production. Conversion costs are allocated evenly throughout production. Zahra uses weighted-average process-costing method. What is the number of equivalent units of work done during the month with regards to direct materials?

- A) 900 units B) 700 units
C) 1,100 units D) 600 units

12. Daniels Corporation used the following data to evaluate their current operating system. The company sells items for \$19 each and had used a budgeted selling price of \$20 per unit.

	<u>Actual</u>	<u>Budgeted</u>
Units sold	280,000 units	279,000 units
Variable costs	\$980,000	\$881,000
Fixed costs	\$58,000	\$45,000

What is the static-budget variance of revenues?

- A) \$299,000 favorable
B) \$260,000 favorable
C) \$260,000 unfavorable
D) \$299,000 unfavorable

13. Which of the following is true of hybrid transfer prices?

- A) The cost used in hybrid transfer prices is always the actual cost.
B) The cost used in hybrid transfer prices is always the budgeted cost.
C) They take into account both cost and market information.
D) They are less popular in manufacturing industry.

備註	一、作答於試題上者，不予計分。 二、試題請隨卷繳交。
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考 試 科 目	成本與管理會計	系 所 別	會計學系	三年級	考 試 時 間	7 月 3 日(三) 第二節
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14. Branded Shoe Company manufactures only one type of shoe and has two divisions, the Stitching Division and the Polishing Division. The Stitching Division manufactures shoes for the Polishing Division, which completes the shoes and sells them to retailers. The Stitching Division "sells" shoes to the Polishing Division. The market price for the Polishing Division to purchase a pair of shoes is \$52. (Ignore changes in inventory.) The fixed costs for the Stitching Division are assumed to be the same over the range of 40,000-101,000 units. The fixed costs for the Polishing Division are assumed to be \$22 per pair at 101,000 units.

Stitching's costs per pair of shoes are:

Direct materials \$18
 Direct labor \$16
 Variable overhead \$14
 Division fixed costs \$12

Polishing's costs per completed pair of shoes are:

Direct materials` \$14
 Direct labor \$7
 Variable overhead \$8
 Division fixed costs \$16

What is the transfer price per pair of shoes from the Stitching Division to the Polishing Division if the transfer price per pair of shoes is 120% of full costs?

- A) \$21.60 B) \$40.80
 C) \$57.60 D) \$72.00

15. Which of the following is NOT correct about the balanced scorecard?

- A) profits and value created for shareholders are perspectives revealed on a balance scorecard
 B) nonfinancial and operational indicators are reported on a balance scorecard
 C) the balanced scorecard reveals information about the success of the company in its target market
 D) the balance scorecard increases managements emphasis on short-term results

備 註	一、作答於試題上者，不予計分。 二、試題請隨卷繳交。
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考 試 科 目	成本與管理會計	系 所 別	會計學系	考 試 時 間	7 月 3 日(三) 第二節
			三年級		

16. Puritan Apparels is a clothing retailer. Unit costs associated with one of its products, Product DCF, are as follows:

<i>Direct materials</i>	<i>\$120</i>
<i>Direct manufacturing labor</i>	<i>40</i>
<i>Variable manufacturing overhead</i>	<i>15</i>
<i>Fixed manufacturing overhead</i>	<i>33</i>
<i>Sales commissions (2% of sales)</i>	<i>5</i>
<i>Administrative salaries</i>	<i>24</i>
<i>Total</i>	<i>\$237</i>

What are the indirect nonmanufacturing variable costs per unit associated with Product DCF?

- A) \$213
- B) \$5
- C) \$29
- D) \$160

17. When the firm uses the target-costing approach to pricing, the target cost per unit is the difference between the per unit target price and the per unit target:

- A) contribution margin B) operating income
- C) cost of goods sold D) gross margin

18. Opportunity costs is defined as:

- A) the cost of manufacturing a one-time-only special order when a firm has excess capacity to make more products
- B) the contribution to operating income that is forgone by not using a limited resource in its next-best alternative use
- C) the sum of variable and fixed costs in a particular business function of the value chain, such as manufacturing costs or marketing costs
- D) the sum of variable and fixed costs in all business functions of the value chain, such as manufacturing costs or marketing costs

備 註	一、作答於試題上者，不予計分。 二、試題請隨卷繳交。
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考 試 科 目	成本與管理會計	系 所 別	會計學系 三 年 級	考 試 時 間	7 月 3 日(三) 第二節
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19. With a constraining resource, managers should choose the product with the:
- A) lowest contribution margin per unit of the constraining resource
 B) highest sales price
 C) highest contribution margin per unit of the constraining resource
 D) highest gross profit
20. Assembly department of Zahra Technologies had 100 units as work in process at the beginning of the month. These units were 60% complete. It has 300 units which are 35% complete at the end of the month. During the month, it completed and transferred 500 units. Direct materials are added at the beginning of production. Conversion costs are allocated evenly throughout production. Zahra uses weighted-average process-costing method. Calculate the total equivalent units in ending inventory for assignment of conversion costs?
- A) 100 units
 B) 105 units
 C) 195 units
 D) 300 units
21. If 1,000 units are produced and only 700 units are sold, _____ results in the greatest amount of expense reported on the income statement.
- A) throughput costing B) variable costing
 C) absorption costing D) job costing
22. All of the following are examples of quantitative factors EXCEPT:
- A) cost of direct materials
 B) budget for marketing activities
 C) product development time
 D) employee morale

備 註

- 一、作答於試題上者，不予計分。
 二、試題請隨卷繳交。

考 試 科 目	成本與管理會計	系 所 別	會計學系	三年級	考 試 時 間	7 月 3 日(三) 第二節
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23. An incremental cost is:
- A) an additional total cost for an activity
 - B) a cost that has already been incurred
 - C) the difference in total costs between two alternatives
 - D) always related to fixed costs
24. Which of the following would be considered in a make-or-buy decision?
- A) fixed costs that will still be incurred
 - B) prepaid rent expense for warehousing finished goods and inventories
 - C) potential rental income from space occupied by the production area
 - D) unchanged supervisory costs
25. Successful implementation of a cost leadership strategy will result in:
- A) large favorable growth and price-recovery components
 - B) large favorable price-recovery and productivity components
 - C) large favorable productivity and growth components
 - D) only a large favorable growth component
26. Monticello Corp manufactures expensive tables. Its varnishing department is fully automated and requires substantial inspection to keep the machines operating properly. An improperly varnished table is very expensive to correct. Inspection hours for the 5,400 tables varnished in September totaled 1,800 hours by 12 employees. Eight quarts of varnish were used, on average, for each table. The standard amount of varnish per table is nine quarts. The cost of inspection for September was equal to the budgeted amount of \$40,200.
- What is the inspection cost per unit? (Round the final answer to the nearest cent.)
- A) \$28.18 B) \$7.44 C) \$8.44 D) \$21.13
27. Which of the following is a financial measure of quality?
- A) operating income growth
 - B) percentage of highly satisfied customers
 - C) number of defective units shipped to customers as a percentage of total units shipped
 - D) interest costs

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考 試 科 目	成本與管理會計	系 所 別	會計學系	考 試 時 間	7 月 3 日(三) 第二節
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三年級

28. Which of the following is an advantage of decentralization?
- A) leads to gains from rapid decision making by subunit managers
 - B) focuses manager's attention on the organization as a whole
 - C) does not result in a duplication of activities
 - D) reduces the cost of gathering information
29. An illustration that resembles the bone structure of a fish and identifies potential reasons why a problem exists is called:
- A) control chart B) Pareto diagram
 - C) cause-and-effect diagram D) time-series graphs
30. Managers identify the relevant costs and benefits for each solution by focusing on:
- A) the alternative solution that will derive maximum customer satisfaction
 - B) how total costs and total revenues will change under each alternative solution related to quality improvements
 - C) how the employees of a company would be able to implement a change
 - D) how long it will take for the improved program to be fully functional
31. The _____ method of profitability analysis recognizes the two basic ingredients in profit-making: increasing income per dollar of revenues and using assets to generate more revenues.
- A) Balanced Scorecard B) Residual-Income
 - C) DuPont D) Economic Value Added
32. Which of the following is a part of the informal management control system?
- A) explicit rules and procedures
 - B) mutual commitments among members of the company
 - C) performance measures and methods
 - D) incentive plans that guide behavior of employees

備 註	一、作答於試題上者，不予計分。 二、試題請隨卷繳交。
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考 試 科 目	成本與管理會計	系 所 別	會計學系	三 年 級	考 試 時 間	7 月 3 日(三) 第二節
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33. A transfer-pricing method leads to goal congruence when:
- A) there is a price difference in different markets due to market inefficiencies
 - B) managers do not act for their own best interest and work for the long-term best interest of the manager's subunit
 - C) managers act in their own best interest and the decision is in the long-term best interest of the company
 - D) there is a low degree of centralization
34. Customer response time comprises of:
- A) manufacturing cycle time and delivery time only
 - B) receipt time and manufacturing cycle time only
 - C) receipt time, manufacturing cycle time, and delivery time
 - D) manufacturing time and delivery time only
35. Which of the following is true of transfer pricing?
- A) It creates costs for the selling subunit.
 - B) It creates revenues for the buying subunit.
 - C) It helps top managers evaluate the performance of individual subunits.
 - D) It makes managers' information-processing and decision-making tasks difficult.
36. Sparkle Jewelry sells 500 units resulting in \$80,000 of sales revenue, \$30,000 of variable costs, and \$26,000 of fixed costs.
- Break-even point in units is:
- A) 260 units B) 300 units C) 540 units D) 560 units

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。

考 試 科 目	成本與管理會計	系 所 別	會計學系	三年級	考 試 時 間	7 月 3 日(三) 第二節
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37. Coldbrook Company has two sources of funds: long-term debt with a market and book value of \$16,000,000 issued at an interest rate of 11%, and equity capital that has a market value of \$5,000,000 (book value of \$4,000,000). Coldbrook Company has profit centers in the following locations with the following operating incomes, total assets, and current liabilities. The cost of equity capital is 17%, while the tax rate is 35%.

	Operating Income	Assets	Current Liabilities
Bish Bash Falls	\$815,000	\$3,750,000	\$820,000
Brooksville	\$1,100,000	\$5,000,000	\$1,200,000
Stonybrook	\$2,450,000	\$9,250,000	\$3,180,000

What is the EVA for Bish Bash Falls?

- A) \$529,750 B) \$278,350 C) \$251,400 D) \$138,800

38. Which of the following statements is true?

- A) The economic, legal, political, social, and cultural environments differ across countries.
 B) The import quotas and tariffs remain the same across all countries according to the standards set by United Nations.
 C) The advances in telecommunications and transportation, the availability of materials and skilled labor does not differ significantly across countries.
 D) The fixed rate policy is followed across all countries to avoid price fluctuations and inflation.

39. _____ would be an uncontrollable factor that a firm would need to consider when evaluating the return on investment of an international division.

- A) Manager's experience B) Manager's compensation
 C) Pricing decisions D) Custom duties

40. To reduce the excessive focus of subunit managers on their own subunits, many companies compensate subunit managers on the basis of:

- A) both the operating income earned by their respective subunits and the company as a whole
 B) both the investing income earned by their respective subunits and the company as a whole
 C) only the investing income earned by their respective subunits
 D) both the net income and earned by their respective subunits and the company as a whole

備

註

- 一、作答於試題上者，不予計分。
 二、試題請隨卷繳交。

考 試 科 目	中級會計學	系 所 別	會計學系三年級	考 試 時 間	7 月 3 日(三) 第 4 節
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一、

綜合損益表係個體於報導期間之財務績效資訊之主要來源，因此綜合損益表若要能完整表達企業之財務績效，於報導期間所有非業主(nonowner)來源所導致的權益變動，都應於綜合損益表中列報。

試作：在現行財務報導準則下，列舉三種非業主來源所導致的權益變動表中事件，但未列入綜合損益表中報導之項目，並說明其不列入綜合損益表之理由？(10分)

二、

甲公司 X1 年 12 月 31 日負債資料如下：

- (1)應付現金股利\$210,000，預計於 X2 年 3 月 15 日發放。
- (2)預收貨款\$650,000，預計於 X2 年 5 月 30 日交貨。
- (3)分期償還公司債\$4,000,000，其中\$1,000,000 於 X2 年 3 月到期，其餘在 X3 年以後到期。甲公司於 X1 年底已提列\$1,000,000 償債基金，可供償還 X2 年 3 月到期之金額。
- (4)可轉換公司債\$1,000,000 到期日為 X5 年 12 月 31 日，自 X2 年 7 月 1 日起至 X5 年 6 月 30 日止，該可轉換公司債持有人可隨時依轉換條件將公司債轉換為甲公司之普通股，每張\$10,000 面額公債可轉換為 200 股甲公司普通股。
- (5)銀行借款：
 - A 銀行：\$900,000，X2 年 4 月 20 日到期。
 - B 銀行：\$800,000，X2 年 1 月 27 日到期。
 - C 銀行：\$600,000，X4 年 3 月 31 日到期。

甲公司 X1 年 12 月至 X2 年 1 月間相關交易資料如下：

X1 年 12 月 10 日甲公司 X1 年 11 月底違反與 C 銀行該筆借款之合約條款，依約需於一個月內清償借款的 80%，於 X1 年 12 月 10 日達成協商，C 銀行同意不予追究，並同意寬限期延至 X3 年 2 月底，且於展期期間內，甲公司有能力改正違約情況，改正後 C 銀行亦不得再要求立即清償。

X1 年 12 月 25 日甲公司與 A 銀行簽訂不可取消合約，合約中 A 銀行同意甲公司於 X2 年到期前可隨時向銀行辦理該筆貸款續貸 9 個月。甲公司管理階層並未確定屆時是否會透過此項合約條款將 X2 年 4 月 20 日到期之 A 銀行借款辦理續貸。

X2 年 1 月 25 日發行普通股 40,000 股（每股面額\$10，市價\$20），所得股款全數用於償還 B 銀行借款，以避免動用 X1 年底帳上之任何現金償還 B 銀行之該筆借款。

甲公司 X1 年度之財務報表係於 X2 年 2 月 1 日對外發布。

試作：列示甲公司 X1 年 12 月 31 日資產負債表中之各項流動負債及非流動負債，並計算流動負債之合計數及非流動負債之合計數。(15分)

考試科目	中級會計學	系所別	會計學系三年級	考試時間	7月3日(三)第4節
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三、

甲營造公司於X1年初承包一項工程，預定三年完工，工程承包價為\$60,000,000。

甲公司判定所承諾之商品及勞務係隨時間逐步滿足之單一履約義務。此外，甲公司判定，以已發生成本為基礎之投入法可提供該履約義務完成程度之適當衡量結果。其他有關資料如下：

	X1年	X2年	X3年	合計
每年實際投入工程成本	\$12,000,000	\$21,000,000	\$31,500,000	\$64,500,000
估計至完工尚須投入成本	36,000,000	33,000,000	—	
依工程進度請款金額	12,600,000	22,500,000	24,900,000	60,000,000
實際收款金額	12,000,000	21,600,000	26,600,000	60,000,000

試作：(20分)

(1)作甲公司 X2 年與該工程相關之所有分錄。(15分)

(2)計算甲公司 X2 年底與該工程相關之應收帳款及合約負債之金額。(5分)

四、

甲公司係生產化學產品之廠商，X1年1月1日購入並安裝完成一座化學藥劑之儲存槽設備，其成本共計為\$10,000,000，耐用年限為5年，以直線法提列折舊，無殘值，耐用年限屆滿時(X5年底)須完成拆除該設備並復原基地，估計除役該設備時將發生除役及復原成本\$2,000,000，X1年甲公司適用之折現率為4%。

試作：(20分)

(1)X3年1月1日，因環保法令修改，甲公司估計X5年底該儲存槽設備之除役及復原成本將增加至\$3,000,000，計算甲公司X3年底與該儲存槽設備資產及負債所有相關項目之金額。(10%)

(2)沿第(1)小題，X4年1月1日，市場利率普遍下跌，甲公司適用之折現率下降為3%，作甲公司X5年度與該儲存槽設備資產及負債相關之所有分錄。(10%)

五、

甲公司於X1年1月1日發行面額\$1,000,000之公司債，票面利率4%，三年到期，每年12月31日付息，按\$972,768價格發行，此發行價格係反映按當時市場利率5%之折現值。甲公司為發行該公司債支付手續費\$1,000。甲公司為避免會計配比不當，將此筆公司債指定為「透過損益按公允價值衡量之金融負債」。X1年1月1日三年期之基準利率為4%。

X1年12月31日該債券之公允價值為\$928,669，三年期之基準利率為6.5%，二年期之基準利率為6%。

甲公司係按有效利息法認列該筆公司債之利息費用並攤銷發行時之折溢價。

試作：甲公司X1年底與該筆公司債相關之分錄。(不包括結帳分錄)(10分)

考 試 科 目	中級會計學	系 所 別	會計學系三年級	考 試 時 間	7 月 3 日(三) 第 4 節
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六、

甲公司於 X3 年 1 月 1 日以平價\$300,000,000 發行三年期，面額\$300,000,000 之可轉換公司債，票面利率 3%，每年年底付息一次。該公司債若不附轉換權利，其市場利率為 5%。依稅法之規定，報稅時稅法並不承認該認股權價值。甲公司於 X3 年及 X4 年之會計所得分別為\$60,000,000 及\$90,000,000，該公司除了該筆可轉換公司債於財稅上有差異外，其他並無任何財稅差異。所得稅率為 20%。

試作：計算甲公司 X4 年度有關該可轉換公司債之利息費用，以及 X4 年底有關該可轉換公司債之帳面金額及其相關之遞延所得稅資產或負債之帳面金額。(10 分)

七、

甲公司是一集團企業之母公司，於 X1 年 1 月 1 日以在集團內繼續服務 3 年為條件，於服務期滿日給與該集團內之員工相當於 60,000 股甲公司股票價值之現金，此現金係由甲公司直接支付予員工。甲公司之股票於給與日之股價為每股\$40。X1、X2 及 X3 年之年底甲公司股票之股價分別為每股\$57、\$50 及\$65。假設有一員工 X1 年全年係於甲公司 100%持有之子公司—乙公司服務，X2 及 X3 年則於甲公司之另一家 100%持有之子公司—丙公司服務，乙公司及丙公司均無須因股份基礎給付交易而支付對價予母公司。

試作：(15 分)

(1)計算甲公司、乙公司及丙公司於 X1 年、X2 年及 X3 年在自己公司帳上各應認列與該名員工相關之股份基礎給付費用之金額。(10 分)

(2)作甲公司 X3 年在自己公司帳上應認列與該股份基礎給付交易相關之分錄。(5 分)

備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。